Amendments to the Claims

This listing of claims will replace all prior versions:

1 (currently amended). A method of modulating inflammatory reactions involving leukocytes and leukocyte precursor cells in a subject, the method comprising selecting for a subject suffering from inflammation, assaying leukocytes or leukocyte precursor cells of the subject for xanthine oxidoreductase (XOR) activity, ~~caused by increased xanthine oxidoreductase activity in leukocytes and leukocyte precursor cells~~ and, when the XOR activity is increased in the subject's leukocytes or leukocyte precursor cells, contacting the ~~a~~ subject with an amount of a xanthine oxidoreductase (XOR) inhibitor effective to modulate said inflammatory reaction in said subject, wherein said oxidoreductase inhibitor is selected from the group consisting of allopurinol, oxypurinol, tungsten, amflutizole, (-)BOF-4272 ([(-)-8-(3-methoxy-4-phenylsulfinylphenyl)pyrazolo(1,5-alpha)-1,3, 5-triazine-4-monohydrate]), diphenyleneiodonium dichloride, glutathione, and dimethylthiourea (DMTU).

2 (original). The method of claim 1, wherein said leukocytes and leukocyte precursor cells are selected from the group consisting of mononuclear phagocytes, neutrophils and eosinophils.

3 (original). The method of claim 1 wherein said inflammatory reaction is a disease selected from the group consisting of chronic heart failure, cardiomyopathy, diabetes, pancreatic inflammation, liver inflammation, Crohn's disease, uveitis, acute lung injury, COPD, sarcoidosis, granulomatous lung inflammation (GLI), acute lymphoblastic leukemia (ALL), ischemia reperfusion injury, hemorrhagic shock and renal transplant rejection.

4 (withdrawn). The method of claim 3 wherein said inflammatory disease is granulomatous lung inflammation.

5 (original). The method of claim 3 wherein said inflammatory disease is acute or chronic lung injury.

6 (canceled)

7 (currently amended). A method of modulating xanthine oxidoreductase (XOR) activity in leukocytes and leukocyte precursor cells comprising assaying for and selecting for increased XOR activity in leukocytes and leukocyte precursor cells and contacting said leukocytes and leukocyte precursor cells with an agent which modulates the expression, synthesis, degradation, secretion, release, half-life, conversion or catalysis of XOR in leukocytes and leukocytes precursor cells thereby modulating XOR activity, wherein said agent is selected from the group consisting of allopurinol, oxypurinol, tungsten, amflutizole, (-)BOF-4272, diphenyleneiodonium dichloride, glutathione, and dimethylthiourea (DMTU).

8 (original). The method of claim 7, wherein said leukocytes and leukocyte precursor cells are selected from the group consisting of mononuclear phagocytes, neutrophils and eosinophils.

9 (original). The method of claim 7, wherein said contacting occurs *in vitro*.

10 (original). The method of claim 7, wherein said contacting occurs *in vivo*.

11 (original). The method of claim 7, wherein said leukocytes and leuckocyte precursor cells are involved in inflammatory reactions.

12 (original). The method of claim 11, wherein said inflammatory reaction is an inflammatory disease selected from the group consisting of chronic heart failure, cardiomyopathy, diabetes, pancreatic inflammation, liver inflammation, Crohn's disease, uveitis, acute lung injury, COPD,

sarcoidosis, granulomatous lung inflammation (GLI), acute lymphoblastic leukemia (ALL), ischemia reperfusion injury, hemorrhagic shock and renal transplant rejection.

13 (withdrawn). The method of claim 12, wherein said inflammatory disease is granulomatous lung inflammation.

14 (original). The method of claim 12, wherein said inflammatory disease is acute lung injury.

15 (canceled)

16 (currently amended). A method of modulating inflammatory reactions involving leukocytes and leukocyte precursor cells in a subject comprising selecting a subject with an inflammatory reaction, assaying leukocytes or leukocyte precursor cells of the subject for xanthine oxidoreductase (XOR) activity ~~with increased xanthine oxidoreductase (XOR) activity in the leukocytes or leukocyte precursor cells~~ and, when the XOR activity is increased in the subject's leukocytes or leukocyte precursor cells, contacting said subject with an amount of an agent which is effective to modulate the expression, synthesis, degradation, secretion, release, half-life, conversion or catalysis of XOR in leukocytes and leukocyte precursor cells thereby modulating said inflammatory reactions, wherein said agent is selected from the group consisting of allopurinol, oxypurinol, tungsten, amflutizole, (-)BOF-4272, diphenyleneiodonium dichloride, glutathione, and dimethylthiourea (DMTU).

17 (original). The method of claim 16, wherein said leukocytes and leukocyte precursor cells are selected from the group consisting of mononuclear phagocytes, neutrophils and eosinophils.

18 (original). The method of claim 16, wherein said inflammatory reaction is an inflammatory disease selected from the group consisting of chronic heart failure, cardiomyopathy, diabetes, pancreatic inflammation, liver inflammation, Crohn's disease, uveitis, acute lung injury, COPD,

sarcoidosis, granulomatous lung inflammation (GLI), acute lymphoblastic leukemia (ALL), ischemia reperfusion injury, hemorrhagic shock and renal transplant rejection.

19 (withdrawn). The method of claim 18, wherein said inflammatory disease is granulomatous lung inflammation.

20 (original). The method of claim 18, wherein said inflammatory disease is acute lung injury.

21-25 (canceled)

26 (new): A method of modulating inflammatory reactions involving leukocytes and leukocyte precursor cells in a subject, the method comprising selecting for a subject with increased xanthine oxidoreductase (XOR) activity in leukocyte or leukocyte precursor cells and suffering from inflammation caused by increased xanthine oxidoreductase activity in leukocytes and leukocyte precursor cells and contacting the subject with an amount of a xanthine oxidoreductase (XOR) inhibitor effective to modulate said inflammatory reaction in said subject, wherein said oxidoreductase inhibitor is selected from the group consisting of allopurinol, oxypurinol, tungsten, amflutizole, (-)BOF-4272 ([(-)-8-(3-methoxy-4-phenylsulfinylphenyl)pyrazolo(1,5-alpha)-1,3, 5-triazine-4-monohydrate]), diphenyleneiodonium dichloride, glutathione, and dimethylthiourea (DMTU).

27 (new). A method of modulating inflammatory reactions involving leukocytes and leukocyte precursor cells in a subject the method comprising selecting for a subject suffering from inflammation, wherein the subject has increased xanthine oxidoreductase activity in leukocytes and leukocyte precursor cells, and contacting the subject with an amount of a xanthine oxidoreductase (XOR) inhibitor effective to modulate said inflammatory reaction in said subject, wherein said oxidoreductase inhibitor is selected from the group consisting of allopurinol, oxypurinol, tungsten, amflutizole, (-)BOF-4272 ([(-)-8-(3-methoxy-4-

phenylsulfinylphenyl)pyrazolo(1,5-alpha)-1,3, 5-triazine-4-monohydrate]), diphenyleneiodonium dichloride, glutathione, and dimethylthiourea (DMTU).